



United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
09/518,110	03/03/2000		Eero Nikula	297-009281-US(PAR)	7553		
7590 08/26/2004				EXAM	EXAMINER		
Clarence A G			JAIN, RAJ K				
Perman & Gree 425 Post Road	—		ART UNIT	PAPER NUMBER			
Fairfield, CT 06430				2664	8		
				DATE MAILED: 08/26/200	4		

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application	on No.	Applicant(s)					
	•	09/518,11	0	NIKULA ET AL.					
•	Office Action Summary	Examiner	-	Art Unit					
		Raj Jain		2664					
	The MAILING DATE of this communication app	.1	cover sheet with the	correspondence ad	dress				
Period for Reply									
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).									
Status	Pagnancive to communication(s) filed on 02 /	Marah 2000							
1)⊠ 2a)⊟									
· _	,_	This action is FINAL . 2b) This action is non-final.							
•	3) Since this application is in condition for allowance except for formal matters, prosecution as to the ments is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.								
-	on of Claims								
,	Claim(s) 1-15 is/are pending in the application.								
	4a) Of the above claim(s) is/are withdrawn from consideration.								
·									
·	☐ Claim(s) 1-15 is/are rejected.								
•	Claim(s) is/are objected to.	v alastian ra	a virom ont						
	Claim(s) are subject to restriction and/o	or election re	equirement.						
9) The specification is objected to by the Examiner.									
,	The drawing(s) filed on <u>03 March 2000</u> is/are: a		d or b)□ objected to b	y the Examiner.					
,	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
11) 🔲 .	The proposed drawing correction filed on	_ is: a)□ ar	oproved b)□ disappi	roved by the Examin	er.				
If approved, corrected drawings are required in reply to this Office action.									
12) ☐ The oath or declaration is objected to by the Examiner.									
Priority under 35 U.S.C. §§ 119 and 120									
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).									
a)⊠ All b)□ Some * c)□ None of:									
	1. Certified copies of the priority documents have been received.								
	2. Certified copies of the priority documents have been received in Application No								
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 									
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).									
 a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. 									
Attachment(s)									
2) Notic	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449) Paper No(s) 3	<u>3.5.7</u> .		rry (PTO-413) Paper No I Patent Application (PT					

Application/Control Number: 09/518,110

Art Unit: 2664

DETAILED ACTION

Specification

The disclosure is objected to because of the following informalities: The title contains the word "realising" which is believed to be "realizing".

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Frodigh et al (US Pat 6,125,148).

Regarding claims 1 and 14, Frodigh discloses a method for conveying signaling information from a transmitting device to receiving device (see Fig 1) in a cellular radio network where user data transmission takes place on a traffic channel (see col 2 lines 47-54) in discrete transmission bursts consisting of consecutive symbols, comprising the steps of:

- -formatting a piece of signaling information into symbols (see claim 1),
- -transmitting the symbols carrying the signifying information as a block of consecutive symbols in a certain transmission bust of a traffic channel (see Fig 3 and col 7 lines 11-20 and lines 47-57), and
 - indicating within said certain transmission burst that it contains symbols carrying

Application/Control Number: 09/518,110

Art Unit: 2664

signaling information (see claim 11).

Regarding claim 2, Frodigh discloses filling of transmission bursts based on HLM or LLM burst schemes (see col 2 lines 10-20).

Regarding claims 3, 4, 6 and 7 Frodigh discloses transmission of HLM and LLM modulated symbols transmitted next to each other, (see col 12 line 49, and col 10 lines 65-col 11 line 10).

Regarding claim 5, Frodigh discloses transmission burst consists of a first half with training sequence and a second half and the step of transmitting the symbols carrying the signaling information (see Fig 4 and col 7 lines 58-67).

Regarding claims 8 and 15, Frodigh discloses dual modulation schemes (see claim 21).

Regarding claim 9, Frodigh discloses various possible modulation schemes employable for digital systems (see col 1 lines 10-45).

Regarding claims 10 and 13, Frodigh discloses various possible schemes employable for digital systems (see col 1 lines 10-45) and modulation constellations (see Figs 2a and 2b) accordingly.

Regarding claim 11, Frodigh discloses placing of flag bits within the transmission bursts (see col 3 lines 28-34, col 4 lines 15-27 and claim 11).

Regarding claim 12, Frodigh discloses plurality of bits to indicate appropriate signaling information (see col 12 lines 9-30).

Conclusion

Page 4

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raj Jain whose telephone number is 703-305-5652. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on 703-305-4336. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.

RJ August 16, 2004

WELLINGTON CHIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600